TEACHER'S GUIDE & SYLLABUS

DIVE and Saxon Math 5/4, 3rd Edition

PARENTS: Important Course Setup Instructions

- □ PARENTS: Watch this <u>Getting Started</u> video with your child.
- Print and read the <u>Student Instruction Sheet</u>
- □ Print the Assignment Chart
- □ Read <u>Memorizing Multiplication Facts</u>.
- □ Critical: Use our frustration free Timed Method, described under Assignment Chart on page 2.
- Determine the number of homework problems your student should do by reading the Mixed Practice Section on page 4.
- Gather Materials: Materials List
- □ Notebook for notes and homework. Some prefer large grid graph paper or unlined paper (spiral drawing book).
- □ Calculators: Use of a standard calculator is allowed only on very large numbers (10,000 or greater), really small numbers (.0001 or less).
- **D** Bookmark this Guide for easy reference.
- **□** Review the remaining pages of this guide as needed.

Need help accessing or viewing the DIVE video lessons?

Stream & Download Access Instructions & Tech Support

VHX: Error SystemTimed Out: Follow these Steps

CD-ROM Access Instructions & Tech Support

Assignment Chart & Schedule

The <u>DIVE Assignment Chart</u> is on page 9. If you have a struggling or reluctant math student, use the Timed Method. Timed Method: <u>Instead of requiring the student to complete the entire lesson in one day</u>, have them work on math <u>five days per week</u>, for no more than 30-45 minutes each day. At the end of that time, even if the lesson is not completed, the student should stop, and then pick up where they left off the next day. This encourages the student to go back and relearn forgotten concepts as needed, without feeling pressured to finish the entire lesson in one day. If your student is new to Saxon, the first 30 lessons, and occasionally throughout the course, may each take two or three days to complete. That's okay! If allowed to use the timed method, mastery, long-term retention, and fluency will develop and the lessons will be completed faster. Learn More: <u>How will my student finish on time?</u>

Can I Skip the Review Lessons or Increase the Pace? If you have a strong math student or your student completed the previous Saxon course with no break, see this article: <u>Skip Review Lessons</u>

Lessons

Each lesson is made up of four parts: **DIVE Lecture, Saxon Facts Practice, Saxon Lesson Practice, and Saxon Mixed Practice**. The DIVE lecture number corresponds with the assigned Saxon lesson for that day. So, if you are assigned Lesson 4, you will watch DIVE Lecture 4 and complete Saxon Lesson 4 in the Saxon Student Textbook.

STEP 1: SAVE TIME! WATCH THE DIVE LECTURE FOR EVERY LESSON

Because the lesson in the Saxon textbook is only a summary of the complete lesson, John Saxon recommended an experienced teacher to teach his courses. In the DIVE lectures, Dr. Shormann includes the missing connections between the lessons, creating bite-sized lessons that are easier to understand. Teaching Saxon to homeschoolers for more than 20 years, he knows where students struggle and adds additional instruction for these concepts. Dr. Shormann does not recommend reading the lesson in the Saxon textbook before watching the lecture.

During the lecture students should take brief notes and solve example problems. After each example problem is presented, pause the lecture and solve it on your notes. Don't just copy the example problems. As John Saxon recommended, **Dr. Shormann uses different example problems than the Saxon lesson.** This provides additional practice on the new concept, if needed.

Occasionally, to provide concrete examples of abstract concepts, a Saxon **Activity Sheet** is used during the lecture. These sheets are in the Saxon Tests & Worksheets booklet.

STEP 2: Do the Facts Tests Daily (in Saxon Tests & Worksheets booklet)

Facts Tests: After the DIVE lecture, open the Saxon Textbook to the assigned lesson. At the top is a small box titled Warm Up. The first line indicates which Facts Test to complete. The Facts Tests are drills used to memorize and develop fluency in the skills that make completing daily homework assignments faster. Do them every time they are assigned. The goal is to do them accurately in 5 minutes or less.

Mental Math & Problem Solving: Do once a week or so. If the student struggles with these, show them how to do the problem and move on. Do not spend more than 5 or 10 minutes on the Mental Math & Problem Solving Section.

STEP 3: Lesson Practice Section

Location: Saxon Textbook The Lesson Practice has 5-10 problems that provide practice on the new concept introduced in the DIVE lecture. Students should review the DIVE lecture, as needed, to solve these problems.

STEP 4: Mixed Practice Builds Long-term Retention

Location: Saxon Textbook The Mixed Practice section provides review of previously learned concepts. John Saxon's unique method of continual review (not spiral) means all previously learned concepts are practiced in the daily homework or the new concept is building on it and they are practiced together. Practicing a concept daily, over a long period of time, is proven to build long-term retention, increase recall speed and raise standardized test scores. Dr. Shormann has developed a very specific system to efficiently relearn forgotten concepts which is essential to building long-term retention. For details, see page 6.

Students will often forget a concept in this section. Don't be concerned about this. The important thing is to quickly re-learn the forgotten concept. A lesson reference number is in parentheses next to each problem that indicates which lesson that concept was taught in. When "stuck" on a problem, simply click on that DIVE lesson to quickly re-learn that concept. Better than an answer, this gives students the opportunity to apply what was just learned, building long-term retention.

At this point, if you "help" your student by showing them how to do the problem correctly, you are removing the opportunity to build retention. This will make math harder. However, if you follow Dr. Shormann's system to efficiently re-learn forgotten concepts, the student will eventually develop fluency which makes learning math faster and easier. For details see page 6.

How many <u>Mixed Practice</u> problems should my student do?

Each Mixed Practice section has 30 homework problems. Because the DIVE lecture provides expert instruction, students don't need as much practice. In 20 years of teaching Saxon to homeschoolers, I have found that most students need to do about 20 problems per lesson to build mastery and fluency. The weekly test scores determine the amount of practice needed. This encourages students to study and do their best on the tests.

Odds or Evens + 5 Method: 20 Mixed Practice Problems Per Lesson

This method can be used as long as the weekly test scores are 80+. If the student is following the Student Instructions on page 6, and test scores drop below an 80 or 85, increase the number of problems to 25 or 30 for a few weeks. Then, try dropping back to 20.

How the Odds or Evens + 5 Method Works:

- 1. On odd numbered lessons, circle all odd numbered questions.
- 2. Circle 5 even numbered questions from the most recent lessons. The lesson reference number, in parentheses next to each question, indicates which lesson that concept was taught.
- 3. On even numbered lessons, circle all even numbered questions and 5 odd numbered questions.

Strong Math Students: Odds or Evens Only Method

If you have a very strong math student, 15 problems in the Mixed Practice section may be enough practice. Do odd numbered problems on odd numbered lessons, and even numbered problems on even numbered lessons. If the student is following the Student Instructions on page 6, and test scores drop below an 85, try the Odds/Evens + 5 Method.

New to DIVE or Saxon Math?

The first 30 lessons of each Saxon text are review and move fairly quickly. However, if you are new to Saxon/DIVE, some of these concepts may be new to your student. It is very important that you use the Timed Method to ensure the student has plenty of time to learn the concepts that are new to them, filling any gaps they may have from transitioning from another curriculum. Don't be surprised if it takes 2 or 3 days to complete one lesson. However, they will eventually develop fluency and math will become faster and easier.

Investigations

Location: Investigations Folder Every 10 lessons there is an Investigation. These provide in-depth study on abstract or harder to grasp concepts. Students watch the corresponding DIVE Investigation lecture and work the problems (don't copy). It is not necessary to do the Investigations questions in the Saxon text.

Weekly Tests

Location: Saxon Tests & Worksheets Booklet. The tests are cumulative, which means there are concepts from all previous lessons. The number in parentheses next to each problem indicates which lesson that concept was taught in. This provides quick and easy re-learning of missed concepts. See the Tests section on the Student Instructions for Lessons & Tests.

Grades

Saxon Solutions Manual

This book has step-by-step solutions to every homework, facts drill, investigation, and test. A grade recording form is on page 8.

Homework (Lesson Practice & Mixed Practice) Grades: The homework is practice (think piano or baseball practice). Don't be concerned about the number of missed homework problems. Students are expected to miss or "forget" some of the concepts until mastery is achieved. The continual "reminder" of solving the problem in the corrections step, over a long period of time, will eventually build mastery and long-term retention. If all the homework is completed and corrected as instructed, a 100 should be recorded. Deduct points for sloppy work, not following instructions, etc.

Test Grades: Test scores are the only tool that should be used to measure understanding. Concepts are not tested until the student has had time to achieve mastery. Tests should be graded by a parent. Mark each wrong problem but do not correct or mark what they did wrong. Instead, the student should correct each missed problem by following the steps on page 7. Any missed problems the student corrects on paper without using any resources, award 1/2 credit. This gives the student an incentive for showing their work. If test scores drop below an 80 or 85 (with extra credit for corrected problems), increase the number of homework problems in each lesson. When test scores go up, you can try reducing the number of homework problems again.

To calculate a final grade, find the average for each column (sum of all grades divided by the number of grades), add all the grades in one column and divide by the number of grades). Then use the following formula to calculate the final grade.

Final Grade = (Total Homework Average x .20) + (Total Test Average x .80)

Grade Scale

 $\begin{array}{l} A = 90 - 100 \\ B = 80 - 89 \\ C = 70 - 79 \\ D = 60 - 69 \\ F = 59 \text{ or below} \\ I = Incomplete \end{array}$

Student Instruction Sheet for Lessons

Parents: 1. Read the SCHEDULE on page 2. Print this page for daily use by the student.

I. Lecture	Corrections
1. Facts Practice Test (Saxon Tests & Worksheets Booklet) Set a timer for 5 minutes and complete the drill. Parents grade it and record the score and time on the Recording Form A (Saxon Test and Worksheet Booklet)	1. Start a new page in your notebook titled, " Corrections: Lesson xxx " and list all the problems marked wrong in the first line, like this: 1, 3, 9, 18
 2. Watch the Lectures. Don't use the book during the lecture. Instead: Take brief notes on headings and formulas. After each example problem is taught, pause the lecture and solve the example problem on your notes. 	2. Check each missed problem for careless mistakes. Often, once you know the answer is wrong, you can see your mistake. If so, solve the problem correctly on your "Corrections" page. Correct all you can like this.
3. Lesson Practice Problems (in Saxon Textbook) - Do all the problems in the Lesson Practice Section. Re-watch the DIVE lecture, as needed.	3. For all remaining missed problems, follow these steps:
4 . Do the Mixed Practice Problems. Be sure to show your work!	 If you haven't already, follow steps A-D to re-watch the video lesson for the problem. Then, try to solve the problem on your corrections page.
 If you can't solve a problem, follow these steps: 	4. For each missed problem you still can't solve, follow these steps:
A. Click the DIVE lecture that matches the number in parenthesis next to the question.	- View the step-by-step solution for this problem in the Solutions Manual.
B. Fast forward the lecture until you see a similar example problem and watch it.	- Try to solve the problem. If you still can't, list the number on your corrections page with a note.
C. Pause the lecture and attempt to work the example problem in the lecture.	- Repeat these steps for each missed problem.
D. Try to solve the homework problem again. If you can't, skip to the next question. Don't spend more than 5-10 minutes "stuck" on a problem. You will learn how to solve it in Step 6.	5. If there are any problems you still can't correct, contact Dr. Shormann using the "Ask Dr. Shormann" contact form at: diveintomath.com/ask-a-math-question/
6. Parent: Grade the Homework (use the Saxon Solutions Manual). Put an x next to each wrong problem. Do not write the correct solution. Give the work back to the student and have them follow the steps under "Corrections".	

Student Instructions for Investigations & Tests

Parents: Read the SCHEDULE section on page 2. Print this page for daily use by the student

Tests	Investigations
Study by working a few practice problems from each lesson listed next to the test number on the assignment chart.	1. Watch the Investigation Lecture.
Tests should be graded by a parent.	- Take brief notes on headings and formulas.
Parents do not correct, just mark wrong problems.	
Check your work and correct all missed problems you can without using any resources.	- After each example problem is taught, pause the lecture and solve each example problem on your notes.
Any missed problems corrected this way should be awarded 1/2 credit. For all others:	- Do not simply copy the example problems. Try to solve them on your own.
 Re-learn and correct all other missed problems by following steps 4 A - D and 	2. Unless instructed otherwise in the video, do not do the questions in the textbook.
do several problems in the Lesson Practice section for that lesson.	

Grade Recording Form

Student Name _____ School Year _____

Course Name _____ Final Grade _____

Week	Lessons & Investigations	Home work Average	Test	Test Grade	Facts Test Time & Grade
1	Lessons 1-4				
2	Lessons 5-8				
3	Lessons 9-11, Investigation 1		Test 1 (1-5)		
4	Lessons 12-16		Test 2 (6-10)		
5	Lessons 17-20, Investigation 2				
6	Lessons 21-24		Test 3 (11-15)		
7	Lessons 25-28		Test 4 (16-20)		
8	Lessons 29-31, Investigation 3		Test 5 (21-25)		
9	Lessons 32-35				
10	Lessons 36-39		Test 6 (26-30)		
11	Lessons 40-42, Investigation 4		Test 7 (31-35)		
12	Lessons 43-47				
13	Lessons 48-50, Investigation 5		Test 8 (36-40)		
14	Lessons 51-54		Test 9 (41-45)		
15	Lessons 55-58		Test 10 (46-50)		
16	Lessons 59-60, Investigation 6				
17	Lessons 61-64		Test 11 (51-55)		
18	Lessons 65-68		Test 12 (56-40)		
19	Lessons 69-71, Investigation 7		Test 13 (61-65)		
20	Lessons 72-75				
21	Lessons 76-78		Test 14 (66-70)		
22	Lessons 79-81, Investigation 8				
23	Lessons 82-84,		Test 15 (71-75)		
24	Lessons 85-87		Test 16 (76-80)		
25	Lessons 88-90, Investigation 9				
26	Lessons 91-93		Test 17 (81-85)		
27	Lessons 94-96		Test 18 (86-90)		
28	Lessons 97-100				
29	Lessons 101-102, Investigation 10		Test 19 (91-95)		
30	Lessons 103-106				
31	Lessons 107-109		Test 20 (96-100)		
32	Lessons 110-111, Investigation 11				
33	Lessons 112-113		Test 21 (101-105)		
34	Lessons 114-115		Test 22 (106-110)		
35	Lessons 116-119				
36	Lesson 120, Investigation 12		Test 23 (111-115)		
	Homework and Test Average				
	Final Gra	de			

DIVE Assignment Chart for Saxon 5/4, Third Edition

Activity Sheets: Located in the Test & Worksheets booklet. For use with the DIVE lecture. **Facts Practice Tests:** Located in the Saxon Tests & Worksheets booklet.

Inv. = Investigation which is found in the Saxon Textbook

Getting Started Video & Student Sheet: Located on page 1 of this Teacher Guide.

*These lessons require materials. See the Materials List.

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
	-	Getting Started	-	 Print the Student Instruction Sheet Print this assignment sheet 	-
1	Test A	□ 1	⊐ All	 New to Saxon: All Problems Others: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29 	Corrections
2	Test A	□ 2	D All	 New to Saxon: All Problems Others: 2, 4, 6, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30 	Corrections
3	Test A	3	□ All	 New to Saxon: All Problems Others: 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19, 21, 23, 25, 27, 29 	Corrections
4	Test A	4 *	□ All	 New to Saxon: All Problems Others: 2, 3, 4, 6, 8, 10, 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 24, 26, 28, 30 	Corrections
5	Test A	□ 5	□ All	 New to Saxon: All Problems Others: 1, 3, 5, 7, 9, 10, 11, 13,14, 15, 16, 17, 18, 19, 21, 23, 25, 26, 27, 29 	Corrections
6	Test A	G	□ All	 New to Saxon: All Problems Others: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 	Corrections
7	Test A	• 7	⊐ All	 New to Saxon: All Problems Others: 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 17, 19, 20, 21, 23, 25, 27, 29 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
8	Test B	□ 8	□ All	 New to Saxon: All Problems Others: 1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 22, 24, 26, 28, 30 	Corrections
9	Test A	9	l All	 New to Saxon: All Problems Others: 1, 3, 5, 7, 8, 9, 10, 11, 13, 15, 17, 19, 21, 22, 23, 24, 25, 26, 27, 29 	Corrections
10	Test A	1 0	□ All	 New to Saxon: All Problems Others: 1, 2, 4, 6, 8, 10, 12, 14, 15, 16, 17, 18, 20, 21, 22, 24, 25, 26, 28, 30 	Corrections
Test 1 (1-5)	Test A	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
Inv. 1	-	🗅 Inv. 1	-	See the steps under "Investigations" on the Student Sheet.	-
11	Test A	u 11	⊐ All	 New to Saxon: All Problems Others: 1, 2, 3, 5, 6, 7, 8, 9, 11, 13, 15, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
12	Test A	□ 12*	l All	 New to Saxon: All Problems Others: 1, 2, 3, 4, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30 	Corrections
13	Test A	1 3	□ All	 New to Saxon: All Problems Others: 1, 2, 3, 5, 7, 9, 10, 11, 12, 13, 15, 17, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
14	Test A	□ 14*	□ All	 New to Saxon: All Problems Others: 2, 4, 5, 6, 8, 9, 10, 12, 13, 14, 16, 18, 20, 21, 22, 23, 24, 26, 28, 30 	Corrections
15	Test A	□ 15	□ All	 New to Saxon: All Problems Others: 1, 3, 5, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
16	Test B	□ 16*	🗅 All	 New to Saxon: All Problems Others: 2, 4, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
Test 2 (6-10)	Test A	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
17	Test B	1 7	⊐ All	 New to Saxon: All Problems Others: 1, 3, 4, 5, 7, 9, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
18	Test B	□ 18*	⊐ All	 New to Saxon: All Problems Others: 2, 4, 6, 8, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28, 30 	Corrections
19	Test A	1 9	⊐ All	 New to Saxon: All Problems Others: 1, 3, 5, 6, 7, 9, 11, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
20	Test B	□ 20*	⊐ All	 New to Saxon: All Problems Others: 2, 4, 6, 7, 8, 10, 12, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 28, 30 	Corrections
Inv. 2	-	□ Inv. 2*	-	See the steps under "Investigations" on the Student Sheet.	-
21	Test B	□ 21*	□ All	 New to Saxon: All Problems Others: 1, 3, 5, 6, 7, 9, 11, 13, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 29 	Corrections
22	Test A	2 2	⊐ All	 New to Saxon: All Problems Others: 2, 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 19, 20,21, 22, 24, 25, 26, 28, 30 	Corrections
23	Test B	□ 23*	⊐ All	 New to Saxon: All Problems Others: 1, 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 21, 23, 24, 25, 27, 29 	Corrections
24	Test B	1 24	⊐ All	 New to Saxon: All Problems Others: 2, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30 	Corrections
Test 3 (11-15)	Test A	-	-	Follow the steps under Tests on the Student Sheet.	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
25	Test B	□ 25	□ All	 New to Saxon: All Problems Others: 1, 2, 3, 5, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
26	Test B	□ 26	□ All	 New to Saxon: All Problems Others: 1, 2, 4, 5, 6, 8, 10, 12, 14, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30 	Corrections
27	Test B	□ 27	□ All	 New to Saxon: All Problems Others: 1, 2, 3, 5, 7, 9, 11, 12, 13, 15, 17, 18, 19, 20, 21, 23, 24, 25, 27, 29 	Corrections
28	Test A	□ 28	□ All	 New to Saxon: All Problems Others: 2, 3, 4, 6, 8, 9, 10, 12, 14, 16, 17, 18, 19, 20, 22, 24, 26, 27, 28, 30 	Corrections
Test 4 (16-20)	Test B	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
29	Test B	2 9	⊐ All	 New to Saxon: All Problems Others: 1, 3, 5, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 23, 25, 26, 27, 29 	Corrections
30	Test B	u 30	□ All	 New to Saxon: All Problems Others: 1, 2, 4, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30 	Corrections
Inv. 3	-	□ Inv. 3*	-	See the steps under "Investigations" on the Student Sheet.	-
Test 5 (21-25)	Test B	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
31	Test B	□ 31	D All	 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 19, 21, 23, 25, 27, 29 	Corrections
32	🗅 Test B	□ 32	🗅 All	 1, 2, 4, 5, 6, 8, 10, 11, 12, 14, 16, 18, 20, 21, 22, 24, 26, 27, 28, 30 	Corrections
33	Test C	□ 33*	🗅 All	 1, 2, 3, 5, 7, 8, 9, 10, 11, 13, 15, 16, 17, 19, 21, 23, 25, 26, 27, 29 	Corrections
34	Test C	□ 34*	D All	 1, 2, 4, 6, 8, 10, 12, 13, 14, 15, 16, 17, 18, 20, 22, 24, 26, 27, 28, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
35	□ Test C	u 35	□ All	 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 15, 17, 19, 21, 23, 24, 25, 27, 29 	Corrections
36	Test C	□ 36	□ All	 1, 2, 4, 6, 7, 8, 10, 12, 14, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30 	Corrections
37	Test D	u 37	🗅 All	 1, 2, 3, 5, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
38	🖵 Test D	□ 38*	D All	 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 28, 30 	Corrections
39	Test E	1 39	□ All	 1, 2, 3, 5, 7, 9, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
Test 6 (26-30)	Test B	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
40	🖵 Test D	u 40*	D All	 2, 4, 6, 7, 8, 9, 10, 12, 14, 16, 17, 18, 20, 22, 24, 25, 26, 27, 28, 30 	Corrections
Inv. 4	-	🖵 Inv. 4*	-	See the steps under "Investigations" on the Student Sheet.	-
Test 7 (31-35)	Test B	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
41	Test E	u 41*	D All	 1, 3, 5, 7, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 27, 29 	Corrections
42	🗅 Test E	4 2*	D All	 2, 4, 6, 7, 8, 10, 12, 13, 14, 15, 16, 18, 19, 20, 22, 23, 24, 26, 28, 30 	Corrections
43	🗅 Test E	u 43	D All	 1, 3, 5, 7, 9, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 23, 25, 26, 27, 29 	Corrections
44	Test F	4 4	□ All	□ 2, 3, 4, 5, 6, 8, 10, 11, 12, 14, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30	Corrections
45	Test F	4 5	□ All	 1, 3, 4, 5, 7, 9, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
46	Test F	4 6	D All	 2, 4, 6, 8, 10, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
47	🗅 Test F	4 7	🗅 All	 1, 3, 5, 7, 9, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
48	🗅 Test F	4 8	D All	 1, 2, 4, 6, 8, 10, 12, 14, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28, 30 	Corrections
49	🗅 Test G	4 9	🗅 All	 1, 2, 3, 5, 7, 9, 11, 13, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
50	🖵 Test G	□ 50	🗅 All	 1, 2, 4, 6, 8, 10, 12, 14, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28, 30 	Corrections
Inv. 5	-	🖵 Inv. 5*	-	See the steps under "Investigations" on the Student Sheet.	-
Test 8 (36-40)	Test C	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
51	Test H	u 51	D All	 1, 3, 5, 7, 9, 11, 12, 13, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
52	Test H	□ 52	D All	 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 26, 28, 30 	Corrections
53	🗅 Test I	□ 53	D All	 1, 2, 3, 5, 7, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 23, 25, 27, 29 	Corrections
54	🖵 Test I	□ 54	🗅 All	 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 23, 24, 26, 28, 30 	Corrections
Test 9 (41-45)	Test E	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
55	Test I	u 55	🗅 All	 1, 3, 5, 6, 7, 9, 11, 13, 14, 15, 17, 18, 19, 0, 21, 22, 23, 25, 27, 29 	Corrections
56	□ Test I	□ 56	D All	 2, 4, 5, 6, 7, 8, 10, 12, 14, 16, 17, 18, 20, 21, 22, 24, 26, 27, 28, 30 	Corrections
57	□ Test J	□ 57	□ All	 1, 2, 3, 5, 7, 8, 9, 11, 13, 15, 17, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
58	□ Test J	□ 58	🗅 All	 1, 2, 4, 6, 7, 8, 10, 12, 14, 16, 18, 19, 20, 22, 23, 24, 25, 26, 28, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
Test 10 (46-50)	Test F	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
59	Test J	□ 59	D All	 1, 3, 4, 5, 7, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21,22, 23, 25, 27, 29 	Corrections
60	□ Test J	□ 60	l All	 2, 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30 	Corrections
Inv. 6	-	🖵 Inv. 6*	-	See the steps under "Investigations" on the Student Sheet.	-
61	🖵 Test I	u 61	l All	 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 21, 23, 25, 27, 29 	Corrections
62	🖵 Test I	G 62	l All	 2, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30 	Corrections
63	□ Test J	G 63	l All	 1, 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 21, 22, 23, 25, 27, 29 	Corrections
64	□ Test J	□ 64	l All	 2, 4, 6, 8, 9, 10, 12, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 28, 30 	Corrections
Test 11 (51-55)	Test H	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
65	□ Test J	G 65	l All	 1, 3, 5, 7, 9, 11, 12, 13, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
66	□ Test J	□ 66	l All	 2, 4, 6, 8, 10, 11, 12, 14, 16, 18, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30 	Corrections
67	🖵 Test I	□ 67	l All	 1, 3, 5, 7, 9, 11, 12, 13, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 29 	Corrections
68	🗅 Test I	□ 68	l All	 2, 4, 6, 8, 9, 10, 12, 14, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 30 	Corrections
Test 12 (56-60)	Test I	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
69	🖵 Test I	G 69	D All	 1, 3, 5, 6, 7, 9, 11, 13, 14, 15, 17, 19, 20, 21, 23, 24, 25, 26, 27, 29 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
70	🖵 Test I	□ 70	D All	 2, 4, 6, 7, 8, 9, 10, 12, 14, 16, 18, 19, 20, 22, 23, 24, 25, 26, 28, 30 	Corrections
Inv. 7	-	🗅 Inv. 7	-	See the steps under "Investigations" on the Student Sheet.	-
Test 13 (61-65)	Test J	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
71	Test H	口 71	D All	 1, 3, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19, 21, 22, 23, 24, 25, 27, 29, 30 	Corrections
72	🗅 Test H	1 72	D All	 2, 4, 5, 6, 8, 10, 12, 14, 16, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 30 	Corrections
73	Test H	□ 73	D All	 1, 2, 3, 5, 6, 7, 9, 11, 13, 15, 17, 19, 20, 21, 22, 23, 25, 27, 29, 30 	Corrections
74	Test H	□ 74	l All	 2, 4, 5, 6, 8, 10, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 30 	Corrections
75	Test H	1 75	D All	 1, 3, 5, 7, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 27, 29 	Corrections
76	Test G	口 76	D All	 2, 4, 6, 7, 8, 10, 11, 12, 14, 16, 17, 18, 20, 21, 22, 23, 24, 26, 28, 30 	Corrections
77	Test G	- 77	D All	 1, 3, 4, 5, 7, 8, 9, 11, 13, 15, 17, 18, 19, 0, 21, 22, 23, 25, 27, 29 	Corrections
78	🖵 Test G	□ 78	l All	 2, 3, 4, 6, 7, 8, 10, 12, 14, 16, 17, 18, 20, 22, 23, 24, 26, 28, 29, 30 	Corrections
Test 14 (66-70)	Test I	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
79	Test G	□ 79*	D All	 1, 2, 3, 5, 7, 8, 9, 11, 13, 15, 17, 18, 19, 21, 22, 23, 25, 27, 29, 30 	Corrections
80	Test G	□ 80	□ All	 2, 4, 6, 7, 8, 10, 12, 14, 16, 18, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30 	Corrections
Inv. 8	-	🖵 Inv. 8*	-	See the steps under "Investigations" on the Student Sheet.	-

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
81	🗅 Test I	□ 81*	D All	 1, 3, 4, 5, 6, 7, 9, 11, 13, 15, 17, 18, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
82	🗅 Test I	□ 82*	D All	 2, 4, 6, 7, 8, 10, 12, 14, 16, 18, 19, 20, 21, 22, 24, 26, 27, 28, 29, 30 	Corrections
83	🖵 Test I	□ 83	🗅 All	 1, 3, 5, 6, 7, 9, 11, 13, 15, 17, 19, 20, 21, 22, 23, 24, 25, 27, 29, 30 	Corrections
84	🖵 Test I	□ 84	🗅 All	 2, 4, 5, 6, 8, 10, 11, 12, 14, 16, 18, 20, 22, 23, 24, 25, 26, 27, 28, 30 	Corrections
Test 15 (71-75)	Test H	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
85	🖬 Test G	□ 85	D All	 1, 3, 5, 6, 7, 9, 11, 12, 13, 15, 16, 17, 19, 21, 23, 25, 27, 28, 29, 30 	Corrections
86	🖬 Test G	□ 86	D All	 2, 3, 4, 6, 8, 10, 11, 12, 14, 16, 18, 20, 21, 22, 23, 24, 26, 27, 28, 30 	Corrections
87	ם Test G	□ 87	D All	 1, 3, 4, 5, 7, 9, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 27, 29 	Corrections
Test 16 (76-80)	Test G	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
88	Test G	□ 88	D All	 1, 2, 3, 4, 6, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30 	Corrections
89	🖵 Test G	□ 89	🗅 All	 1, 3, 5, 7, 9, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 29 	Corrections
90	🖵 Test I	90	🗅 All	 2, 4, 6, 8, 10, 12, 14, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 30 	Corrections
Inv. 9	-	□ Inv. 9*	-	See the steps under "Investigations" on the Student Sheet.	-
91	🖵 Test I	91	□ All	 1, 3, 5, 7, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 21, 23, 25, 27, 29, 30 	Corrections
92	🗅 Test I	92	🗅 All	 2, 4, 6, 8, 10, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 26, 28, 29, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
93	🗅 Test I	93	D All	 1, 3, 5, 7, 8, 9, 11, 12, 13, 15, 17, 19, 21, 22, 23, 25, 27, 28, 29, 30 	Corrections
Test 17 (81-85)	Test J	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
94	🗅 Test H	94	D All	 1, 2, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 26, 28, 30 	Corrections
95	🗅 Test H	95	D All	 1, 3, 4, 5, 7, 9, 11, 13, 15, 16, 17, 19, 21, 22, 23, 25, 26, 27, 29, 30 	Corrections
96	Test H	96	D All	 1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 29, 30 	Corrections
Test 18 (86-90)	□ Test G	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
97	Test H	97	D All	 1, 3, 5, 6, 7, 8, 9, 11, 12, 13, 15, 17, 19, 21, 23, 25, 27, 28, 29, 30 	Corrections
98	Test H	□ 98*	D All	 1, 2, 3, 4, 6, 7, 8, 10, 12, 14, 16, 18, 19, 20, 22, 24, 26, 28, 29, 30 	Corrections
99	□ Test J	99	🗅 All	 1, 3, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30 	Corrections
100	□ Test J	u 100*	🗅 All	 2, 3, 4, 5, 6, 8, 10, 11, 12, 14, 16, 18, 19, 20, 22, 24, 26, 28, 29, 30 	Corrections
Inv. 10	-	🖵 Inv. 10*	-	See the steps under "Investigations" on the Student Sheet.	-
Test 19 (91-95)	🗅 Test I	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
101	□ Test J	u 101	D All	 1, 2, 3, 4, 5, 7, 9, 11, 12, 13, 15, 17, 18, 19, 21, 23, 24, 25, 27, 29 	Corrections
102	Test A	□ 102*	□ All	 2, 4, 6, 8, 9, 10, 12, 13, 14, 16, 17, 18, 19, 20, 22, 24, 26, 28, 29, 30 	Corrections
103	Test A	u 103	D All	 1, 3, 5, 7, 9, 10, 11, 12, 13, 15, 17, 19, 21, 23, 25, 26, 27, 28, 29, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
104	Test A	□ 104	l All	 2, 3, 4, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 23, 24, 26, 28, 29, 30 	Corrections
105	Test A	□ 105	□ All	 1, 3, 5, 6, 7, 9, 11, 13, 15, 17, 18, 19, 20, 21, 23, 25, 27, 28, 29, 30 	Corrections
106	Test A	□ 106	D All	 2, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 23, 24, 26, 27, 28, 29, 30 	Corrections
107	□ Test B	u 107	l All	 1, 3, 5, 7, 9, 10, 11, 13, 14, 15, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29 	Corrections
108	Test B	□ 108	l All	 2, 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 22, 23, 24, 26, 27, 28, 29, 30 	Corrections
109	Test B	u 109	l All	 1, 3, 4, 5, 7, 9, 11, 13, 14, 15, 16, 17, 19, 21, 23, 25, 26, 27, 28, 29 	Corrections
Test 20 (96-100)	Test H	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
110	Test B	u 110	D All	 2, 4, 6, 8, 9, 10, 12, 13, 14, 16, 18, 20, 22, 23, 24, 25, 26, 28, 29, 30 	Corrections
Inv. 11	-	🖵 Inv. 11*	-	See the steps under "Investigations" on the Student Sheet.	-
111	🖵 Test G	□ 111*	l All	 1, 3, 5, 6, 7, 8, 9, 11, 13, 15, 16, 17, 18, 19, 21, 23, 25, 26, 27, 29 	Corrections
112	🖵 Test G	u 112	l All	 2, 4, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 18, 20, 22, 23, 24, 26, 28, 30 	Corrections
113	🖵 Test I	u 113	l All	 1, 3, 5, 6, 7, 8, 9, 11, 13, 14, 15, 17, 19, 20, 21, 22, 23, 25, 27, 29 	Corrections
Test 21 (101-1 05)	Test A	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
114	🗅 Test H	□ 114	l All	 2, 4, 6, 7, 8, 10, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 30 	Corrections

Lesson	Facts Practice	DIVE Lecture	Lesson Practice	Mixed Practice	Corrections
115	🗅 Test H	u 115	🗅 All	 1, 3, 5, 7, 8, 9, 10, 11, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 29 	Corrections
Test 22 (106-110)	Test B	-	-	Follow the steps under Tests on the Student Sheet.	Corrections
116	🗅 Test H	u 116	D All	 2, 4, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 24, 26, 27, 28, 30 	Corrections
117	□ Test J	u 117	l All	 1, 3, 5, 6, 7, 9, 11, 13, 14, 15, 16, 17, 18, 19, 21, 23, 25, 26, 27, 29 	Corrections
118	🗅 Test I	u 118	D All	 2, 4, 6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 26, 28, 30 	Corrections
119	□ Test J	u 119	□ All	 1, 3, 5, 7, 9, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 27, 28, 29 	Corrections
120	□ Test J	□ 120	🗅 All	 2, 4, 6, 8, 10, 12, 14, 15, 16, 17, 18, 19, 20, 22, 24, 25, 26, 28, 29, 30 	Corrections
Inv. 12	-	□ Inv. 12*	-	See the steps under "Investigations" on the Student Sheet.	-
Test 23 (111-115)	Test G	-	-	Follow the steps under Tests on the Student Sheet.	Corrections

Frequently Asked Questions

My student misses too many Mixed Practice problems.

Because these problems are from previous lessons, and mastery and long-term retention may not be developed, students often "forget" some concepts in this section. Don't be concerned. Simply select the DIVE lecture that matches the number in parentheses next to each problem. Fast-forward to a similar example problem and watch that section again. Solve the example problem on paper, then attempt the homework problem again. Usually, they can then solve the problem on their own.

Better than an answer, this provides an opportunity to re-learn and apply, building mastery and long-term retention. If you "help" your student before they attempt to relearn, you are removing the opportunity to build retention. This will make math harder. However, if given the extra time required to to re-learn, the student will eventually build fluency which makes learning math faster and easier.

Occasionally, even after re-watching the lecture, they student may not be able to solve the problem. That's OK. They should mark it wrong and go to the next question. It will be corrected during the Corrections step on the Student Instructions on page 6 of this guide.

New to DIVE or Saxon Math?

The first 30 lessons of each Saxon text are review and move fairly quickly. However, if you are new to Saxon/DIVE, these lessons may not be review. It is very important that you use the Timed Method to ensure the student has plenty of time to learn the concepts that are new to them, filling any gaps they may have from transitioning from another curriculum. Don't be surprised if it takes 2 or 3 days to complete one lesson. However, they will eventually develop fluency and math will become faster and easier.

Solutions for Struggling Students

If several test scores, after adjusting for partial credit, drop below 70 % for several tests in a row, follow the remediation steps below. If you have any trouble, or need more detailed assistance, please contact us using this <u>contact form</u>.

My student is currently struggling in DIVE/Saxon 5/4.

Third Grade Students (according to their birthday):

- Has the student successfully completed a third grade math curriculum or the Saxon Placement test? If not, consider one of the following:
 - Start the course over and let the student work at their own pace for 30 minutes per day 4-5 days per week, using a multiplication chart. Allow the student to finish the course over two years.
 - Switch to Saxon 3

Fourth Grade Students (according to their birthday):

Has the student <u>memorized</u> (3 seconds or less- no skip counting, using fingers or tricks, etc) their multiplication facts to 9?

No: Click Here

Yes: Carefully read this entire guide, including the Time-Saving Tips on page 4. Make sure to use the timed method. Back the student up 10 lessons and repeat all assignments for these lessons using the instructions on page 5.

If you have a reluctant math student, you may consider either starting over and spreading the course over two years. Be sure to use the course as instructed, including the Timed Method.